

# The National System of Interstate and Defense Highways

INTERSTATES 1950 - 1995 1000 YEARS

Featuring lows s Interstate System

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# lowa's Interstate System at a Glance

Name:

The National System of Interstate and Defense Highways, commonly called the interstate. It was renamed in 1990 "The Dwight D. Eisenhower System of Interstate and Defense Highways" in honor of what would have been President Eisenhower's

100th birthday.

Length:

781 51 miles

Total cost:

\$1.05 billion

Cost per mile:

\$1.34 million

Land acquired for roadway and

right of way (estimate):

34,860 acres

First section opened:

September 21, 1958 (Interstate 80/35)

Last section opened:

September 12, 1985 (Interstate 380)

Years to complete:

27 years

Numbering system:

Main interstates are either one or two digits Auxiliary routes are numbered with three digits, their last two digits are the same as the major route to which they are connected.

Route numbers:

Routes with odd numbers run north-south;

those with even numbers, east-west.

Mile posts:

Mile posts are numbered from "0" at the

southern and western borders where the

routes begin in each state.



## **Celebrating 40 Years**

une 29, 1996, marks the 40th anniversary of the National System of Interstate and Defense Highways, often called 'the greatest public works project in history." This year's celebration recognizes the signing of the Federal Highway Act of 1956 by President Dwight D. Eisenhower, which created the National System of Interstate and Defense Highways.

Today the national interstate system consists of: 45.530 miles of roadway; only 1% of all U.S. road mileage, but carries 22% of the vehicle traffic; more than 15,000 interchanges; and over 54,000 bridges.

# Before the National Interstate Highway System

We can trace the interest of the federal government in roadways between states (interstate highways) back to as early as 1803 when the government provided funding for the construction of the National Pike from Cumberland, Maryland, to Wheeling. West Virginia, to ease the movement of the westward-bound pioneers

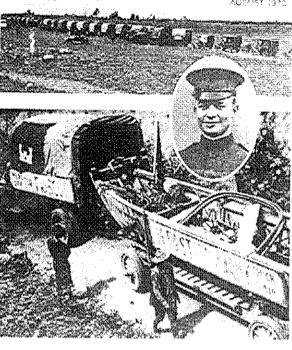
On June 29, 1956, President Dwight D Eisenhower signed the law creating the Interstate Highway System

On June 30, 1956, lowa was allotted \$20.4 million for construction of its portion of the interstate system.

In July 1956 the
American Association
of State Highway
Officials adopted
design standards that
the Secretary of
Commerce approved
for use in
development of the
Interstate Highway
System.

In 1956 the lowa
Highway Commission
committed a major
share of its future
resources to the
construction of the
interstate

# CONSTRUCTOR



Yet the idea of an extensive "national" interstate highway system, one that connected people from coast to coast and border to border probably didn't occur until 116 years later, in the year 1919

It was in 1919 that General John J. Pershing. Commander of American Forces in World War I, assigned Lt. Dwight D. Eisenhower the task of discovering just how quickly the U.S. could mobilize its troops in the event of war

To complete his assignment, young Army Lieutenant Eisenhower assembled a convoy of military trucks and personnel. He led the contingent from Washington, D.C., to San Francisco. California as they made their way along a route that included Cedar Rapids and other towns on the Lincoln Highway.

Many obstacles plagued Lt Eisenhower's trip across America. Blowing dust in the dry periods blasted the convoy, they were stuck in the mud on rainy days, and their trucks fell victim to bridges that couldn't bear their weight.

After finally reaching California, Lt Eisenhower provided his findings to General Pershing. His report stated that it took 62 days and travel over more than 3,000 miles to complete the trek across the United States. He also reported on the many obstacles the convoy faced, and how these would influence troop movements should the U.S. forces be called into action

Lt Eisenhower's venturous travels across the U.S. resulted in one of the most significant national documents - The Pershing Map - which was published in 1922. This map represented a new vision for this country - a proposed system of 8.000 miles of interstate highways. Unfortunately, the proposal was ignored by congress.

Eisenhower who later began President Dwight D Eisenhower recalled his unique trek across America when he signed the law creating today's interstate highway system.

# War Delays the Interstate

The United States' participation in World War II interrupted further progress toward a national system of interstate highways.

During World War II, President Roosevelt ordered that funds appropriated for highway construction be restricted to those projects essential to national defense By April 1942, all new highway construction projects valued at more than \$5,000, came to a halt unless they were certified as essential to the war effort.

These wartime restrictions, in addition to the lack of maintenance and new construction, left our country's roads in worse condition than before the war

In October 1956 the Highway Commission let contracts worth \$13 million for interstate construction.

In 1956 the average speed between major metropolitan cities in lowa was 36.5 miles per hour, therefore, it took ten hours to travel 365 miles. Today it takes nearly half that time...

The State of Missouri
built the first segment
of the national
interstate system in
1956. It was a portion
of 1-70 near St.
Charles, Missouri.

In 1957, before construction of the interstate, it took eight hours to cross lowa on U.S. Highway 6.

On September 21, 1958, the first segment of lowa's interstate was opened to the public, which was located at I-35/I-80 at the southwest edge of Des Moines

# **Our National Security**

Although World War II put a stop to most highway construction, the entrance of America into the war did help Congress and the President refocus their thoughts to the logistical problems of the existing highway system as it related to mobilizing a nation during wartime.

Therefore, it was national security, not convenience or economic development that was the real impetus behind President Dwight D Eisenhower's proposal for a National Interstate System.

President Eisenhower believed that an interstate highway system was essential to our national defense. A national highway system could be used to effectively deploy personnel, equipment and supplies necessary during wartime.

He also feared the threat of atomic disaster and its deadly effects on civilians. President Eisenhower believed that an interstate network could serve as the main artery for evacuation of millions of urban dwellers should we be attacked.

Besides his concerns for national security. President Eisenhower's proposal was also influenced by the German Autobahn. During World War II, while serving as the Supreme Commander of the Allied Forces in Europe, Eisenhower was amazed by the speed and ease in which the German Forces traversed the countryside. He envisioned such an efficient system in the states

# The Federal Aid Highway Act of 1956

The vision of a national interstate system finally became a reality on June 29, 1956, some 40 years ago, when President Dwight D. Eisenhower signed legislation for construction of the 42,500 mile Interstate Highway System. The landmark bill was officially called the Federal Aid Highway Act of 1956. Later the system was designated The National System of Interstate and Defense Highways

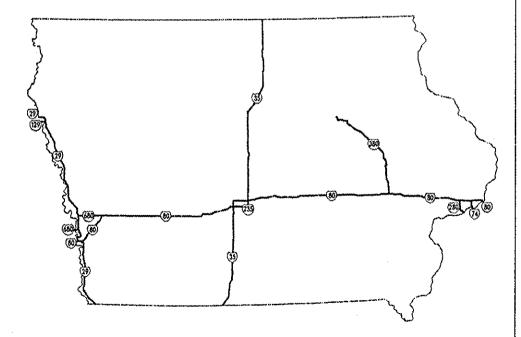
The Congressional intent of the Federal Aid Highway Act of 1956 was that:

- (1) a national system of interstate highways was essential to the national interest:
- (2) the interstate system would be constructed over a 13-year period;
- (3) the entire system would be brought to simultaneous completion;
- (4) more than 90% of all cities with a population of 50 000 or more would be connected;
- (5) 65% of the nation's urban population and 50% of the rural population would be served; and
- (6) the most important defense requirements would be met.

The federal act also required that states build roadways that would connect principal metropolitan areas by the most direct route. It provided \$24 billion toward construction over a 13-year period, with states contributing approximately \$2.5 billion in matching funds.

In 1958 the lowa
Highway Commission
made its first \$100,000
investment toward the
planting of trees,
shrubs and grasses
along lowa's interstate
highways.

# **Iowa's Interstate System**



lowa's Interstate System Route			First Section	Final Section	
Number	Route Description		Opened to Traffic	Opened to Traffic	Length
1-29	From the Iowa-Missouri state line southwest of Hamburg north via Council Bluffs to Sioux City to the Iowa-South Dakota state line.	<del></del>	October 1 1958	August 31, 1973	148.77 miles
1-35	From the Iowa-Missouri state line south of Lamoni joining I-80 and skirting Des Moines on the west and north sides north past Ankeny. Ames and Mason City to the Iowa-Minnesota state line southeast of Albert Lea Minnesota Joined the metropolitan centers of the upper Midwest - Kansas City. Des Moines and Minneapolis		September 21, 1958	November 14, 1975	218 51 miles
1-74	From the Iowa-Illinois state line at Bettendorf and the Mississippi River, northeast of Davenport to I-80		August 30, 1968	November 26 1974	5 42 miles
1-80	From the Iowa-Nebraska state line northeasterly via Council Bluffs. Adair and West Des Moines, then easterly via Newton, Iowa City, and the Davenport-Bettendorf area to the Iowa-Illinois state line. Recognized as the Midwest connection between Omaha and Chicago.		September 21, 1958	December 15 1972	292.26 miles
1-129	From a junction with 1-29 south of Sioux City to the Iowa- Nebraska state line at the Missouri River en route to South Sioux City—The shortest—Iowa interstate route		November 22, 1976	November 22. 1976	26 miles
1-235	From a point on I-35 in West Des Moines, through the City of Des Moines, to another point on I-35 north of Des Moines		December 14, 1961	October 30, 1968	13.83 miles
1-280	From the Iowa-Illinois state line southwest of Davenport to a point on I-80 northwest of Davenport.		December 1, 1960	October 25 1973	9 58 miles
1-380	From a junction with I-80 near Iowa City, via Cedar Rapids and Waterloo to a junction with Iowa Highway 20 and Iowa Highway 518. The completion of I-380 finished Iowa's interstate system		September 19 1973	September 12 1985	72 41 miles
1.480	From the Iowa-Nebraska state line via Council Bluffs to a point on I-29 in Council Bluffs	• :	November 21, 1966	November 21, 1966	75 miles
1-680	Route consists of two sections: First from the Iowa-Nebraska state line north of Council Bluffs to a point on I-29. The second from another point on I-29 south of Loveland to a point on I-80 northeast of Neola.	•	December 13. 1966	Apríl 21. 1979	19.72 miles

Total 781.51 miles

In 1960 a report
prepared for the lowa
Legislature
recommended the
development of a
limited system of
freeways to
supplement the
interstate system

By the end of 1965, 371.98 miles of interstate were open to traffic.

In 1965 a new Chevy \*\*
sold for \$2,731 and
gas cost about
33 cents a gallon.

# Importance of the Interstate to Iowans

Iowa's interstate highway system was designed to serve the greatest number of motorists possible with comfort and ease of driving. It was also designed to save travelers' money by providing a safer system and a more economical surface on which to drive

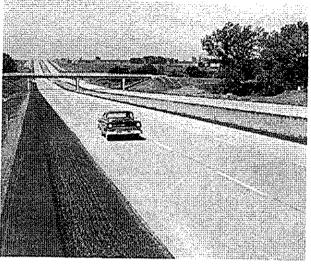
Most Iowans had no idea in 1956 how much the interstate system would change their lives. It was a different time in America. Motorists enjoyed summer vacations in their '57 Chevies. 'Ozzie and Harriet' was popular on television, and Rock and Roll fans listened to a new musician named Elvis. Nevertheless, the new highways did dramatically change people's lives. They improved public safety, shortened traveling time, reduced operating costs, promoted economic development and increased personal mobility.

#### Public Safety

The interstate system made it safer for motorists to travel. It moved drivers effortlessly past towns and cities without traffic jams intersections, traffic lights, frequent slow-downs, and numerous hills and curves.

Driving on the interstate in Iowa required motorists to adopt some new driving habits. In the 1960s the Highway Commission offered the following safety tips for drivers.

- Know where you are going when you start your trip, you should know your route to the interstate and the interchange where you leave
- Know where you will stop controlled access is the key to modern highways, but it means that service stations, restaurants and motels will be available only by leaving the interstate



Know how to enter and leave the interstate - you should know how to look for gaps in the oncoming traffic and accelerate to the speed of traffic before merging

- Travel at a speed that floats with the traffic.
- Do not travel in the "blind spot" to the side or rear of other automobiles.
- Stop only in an emergency
- Prepare in advance for emergencies—think of what to do in case of motor failure or another vehicle going out of control.
- Use your turn signals when changing lanes

#### Travel Time

One of the greatest benefits the interstate provided travelers was a significant reduction in travel time. In 1956 the average speed between major metropolitan cities in Iowa was 36.5 miles per hour. It took motorists 10 hours to safely travel 365 miles. Today you can safely travel 365 miles in just 5.6 hours, nearly half the time.

On November 21, 1966, the final section of 1-480 opened to traffic.

In 1966 the first modern rest areas, featuring picnic tables, telephones, running water, restroom facilities and travel information, were placed at convenient intervals along the interstate in lowa.

On June 30, 1968, 498 miles of the interstate system in lowa were open to the public.

On October 30, 1968, the final section of I-235 opened to traffic.

In 1968 the Federal
Highway Act added
1,500 miles to the
previously authorized
41,000 miles,
extending service to
important urbanized
areas not in the
corridors of the
original network

On December 15, 1972, the final section of I-80 opened to traffic.

#### **Operating Costs**

Removing barriers such as steep grades, traffic signals and stop signs saved vehicle operating costs. The reduction in starts and stops meant less fuel and oil consumption, tire wear and maintenance

#### **Economic Benefits**

Construction of the interstate can be closely linked to Iowa's economic growth over the last 40 years Improved accessibility to markets, raw materials and consumers increased the use of the land near interstate routes. The highway system also benefited employers and employees by broadening the labor and job markets and reducing commuter travel time.



#### Personal Mobility

The interstate gave people additional mobility and a better opportunity to shop for goods and services and enjoy leisure activities

# **Building Iowa's Interstate System**

The construction of Iowa's interstate system was one of both controversy and celebration.

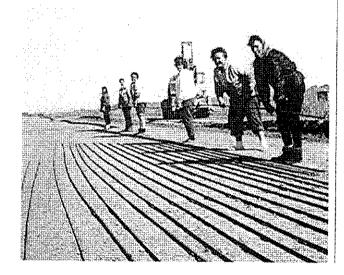
#### The Controversy

The National System of Interstate and Defense Highways, the largest single construction project ever attempted by any nation, was not an idea void of controversy There was never a question about whether America should have such an elaborate system. The controversy surrounded such issues as: where they would build it; how quickly they would build it; and how it would change the lives and habits of countless Americans

The atmosphere of criticism continued to escalate during the completion of the interstate. The work was frequently delayed and countless lives were disrupted. The government's estimate of the time necessary to complete the national system was 13 years. It took Iowa 17 years to complete the major portions of its system and 27 years to complete the entire project, which included additional freeways.

Not everyone in Iowa was pleased with this new means of transportation. An estimated 34,000 acres of land were purchased for the roadway and right of way; small towns that had previously thrived along Iowa's primary highways suffered economically; and homeowners and businesses were moved to make way for the interstate

Iowa, like most states, tried to minimize the hardships that faced businesses, families and individuals. They used mitigation techniques such as relocation assistance joint development and planning with communities, and noise and pollution controls.



In 1973 an international oil crisis triggered a gasoline shortage and a national order to reduce highway speeds to 55 miles per hour.

On August 31, 1973, the final section of I-29 opened to traffic.

On October 25, 1973, the final section of 1-280 opened to traffic.

On November 26, 1974, the final section of I-74 opened to traffic On November 14, 1975, the final section of 1-35 opened to traffic

On November 7, 1976,
the lowa Department
of Transportation
became one of the
nation's leaders in
completing the
interstate with the
opening of a 50-mile
segment that
completed the original
710 miles

#### The Celebration

Criticism and fear of multi-lane. limited-access highways faded away as people in Iowa began celebrating its benefits. By making the sacrifices, the interstate gave Iowans a vital link between people's places of work. home and leisure



Iowans marveled at the interstate's promise of speed, convenience and efficiency. The interstate brought a new way of traveling for Iowa motorists. The wide-open concrete autoways fulfilled an American dream no intersections, fewer sharp curves, no traffic lights and no lack of passing lanes.

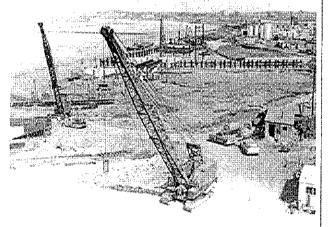
The interstate system put Iowa at the crossroads of the national highway system that stretched from San Francisco to New York, from Duluth to the Gulf of Mexico, and from the North Dakota-Canadian border south to connect with other interstate routes at Kansas City Located at the crossroads, Iowa became a major distribution center which resulted in the boon in the trucking industry in the state

The interstate system also led to prosperity and economic growth for many communities. Rows of corn and soybeans that surrounded Iowa cities in 1956 are today rows of office buildings, commercial developments and houses worth millions of dollars. This type of growth is

evident in cities like Ames, Ankeny, West Des Moines, Cedar Rapids, Waterloo, Iowa City, Council Bluffs. Davenport and Sioux City.

## 27 Years of Construction

On June 30, 1956. Iowa was allotted \$20.4 million for construction of its portion of the interstate system. Shortly afterwards, the Highway Commission confirmed Iowa's commitment to the national project by agreeing to devote a major share of its highway construction resources to the building of the interstate system



The Highway Commission started with a blank slate when they began sketching out Iowa's portions of the interstate system. Efforts were quickly initiated to begin design of the system, acquire the needed right of way and finally, build what was to be a 710-mile ultra-safe highway system.

Iowa's original interstate plan included the development of Interstates 29, 35, 74 and 80. The Highway Commission estimated that it would cost taxpayers \$478.77 million to complete all 710 miles

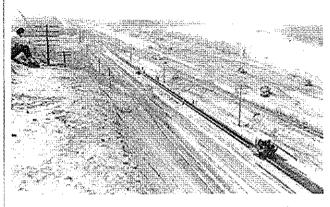
Eventually, other freeways were added to Iowa's plan and the total miles of interstate system was raised to 781.51. With the additional highways, the Highway Commission revised its estimated cost to \$588.6 million.

On November 22, 1976, the final section of I-129 opened to traffic.

On December 31, 1977, Iowa had 728 79 miles of interstate open to traffic

As of December 31, 1977, work had either been completed or was under way on 99.4% of 42,225 miles of the National Interstate System. On April 21, 1979, the final section of I-680 opened to traffic.

lowa's interstate
system was
completed in 1985
when I-380 between
Cedar Rapids and
Waterloo was
finished. It took
nearly 27 years and
more than \$1 billion
to complete the entire
system.



In October 1956 the Highway Commission let the first interstate project for bid. By September 21 1958, the first section was opened to the public. The project was a tiny section at the southwest edge of Des Moines I-35/I-80

On November 7, 1976, the Iowa Department of Transportation became one of the nation's leaders in completing the four-lane interstate system by opening a 50-mile segment on I-35 between former U S 20 near Williams and former Iowa 106 near Clear Lake The opening marked completion of the original 710 miles of the system

On September 12, 1985, nearly 27 years after the first section of roadway opened in 1958. Iowa's interstate system was complete. The last section opened to the public was located on Interstate 380, the link between Waterloo and Iowa City

The largest and most expensive public works project in the state's history totaled 781 51 miles, cost \$1.05 billion and was constructed at a cost of \$1.34 million per mile

### The Possible Dilemma

America's interstate system is now becoming a victim of its own awesome success. In 1956 Congress never envisioned its incredible results - more people are traveling to more places than ever before. Americans are traveling almost twice as much as they did in 1973, and the number of cars and trucks on the nation's roads has increased by more than 50 percent.

This success poses a real dilemma for Americans
Though highway spending has increased steadily since
1956, it has not kept up with inflation. Considering the
current budget debate in Congress - the plan for a
balanced budget in seven years - transportation funding
may fall short of what is needed to maintain the system.

The combination of this incredible success and potential lack of funding means that in the future Iowans may be facing a bumpy road. During its 40-year life, the interstate system has taken a real beating from high usage and vehicle weights. Nearly 35% of the urban interstate highways in the country are rated as being in poor or mediocre condition.

With an eye on the possible dilemma. Iowa is already looking for ways to overcome any potential problems. The Iowa Department of Transportation is developing a plan called Towa in Motion, a strategic plan and vision for transportation in Iowa for the next 25 years.

Iowans are encouraged to actively participate in this planning process. If you would like to help shape the future of transportation in Iowa, call or write your local transportation planner and share your ideas and comments.

In 1990 Congress formally named the interstate "The Dwight D. Eisenhower System of Interstate and Defense Highways."

On November 28, 1995, President Clinton signed the National Highway System Designation Act of 1995 repealing the national speed limit.

# **Iowa Transportation Planners**

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